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Supporting Information.

S.I.1. Tabulation of fit parameters to NR in figure 5.

Table S.I.1. Fitted parameters for composition profiles shown in figure 5.

30 wt% (through air)			
layer	Thickness	SLD	roughness
1	516.19	-0.32	10
2	150.71	5.72	24.494
3	24.254	3.1003	3

40 wt% (through air)			
layer	Thickness	SLD	roughness
1	231.63	-0.32	10
2	201.42	5.72	30.458
3	16.656	3.1254	5

50 wt% (through air)			
layer	Thickness	SLD	roughness
1	118.71	-0.32	10
2	220.81	5.72	61.068
3	15.501	3.451	5

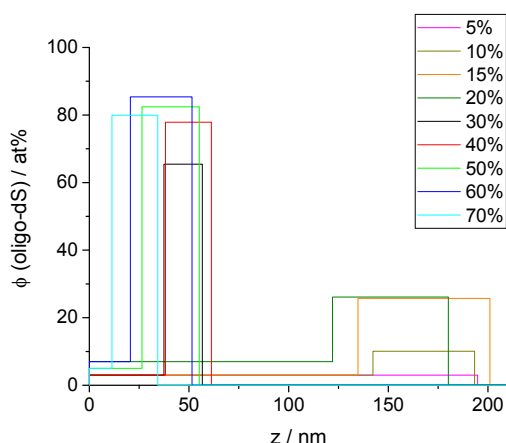


Figure S.I.2: Concentration profiles for oligo d-styrene in hPI derived from ERDA data, prior to normalisation with respect to total film thickness.

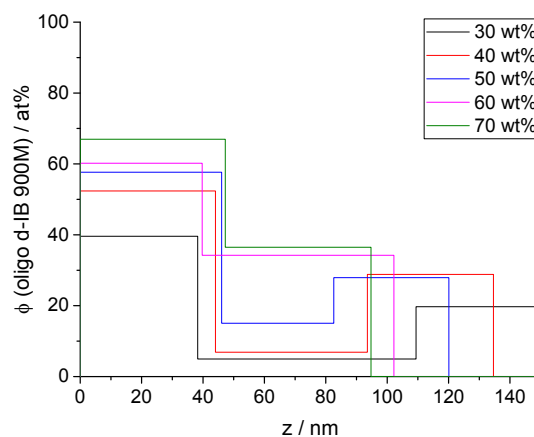


Figure S.I.3: Concentration profiles for oligo-dIB in PB derived from ERDA data, prior to normalisation with respect to total film thickness.

S.I.4. NR results for dsq in PI and PB films.

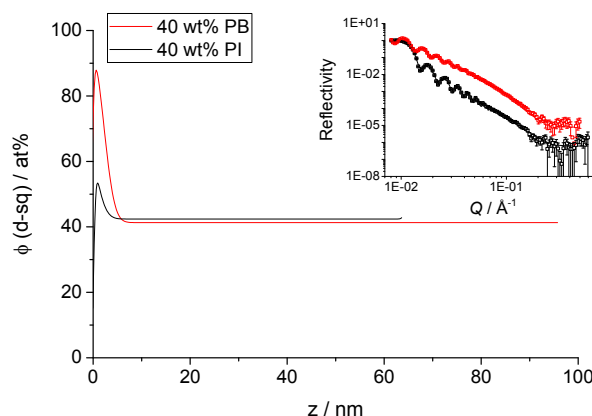


Figure S.I.4. NR data, fits and profiles for the d-sq in a thin PI and PB film.

40 wt% PB (through air)

layer	Thickness	SLD	roughness
Fronting	INF	0	
1	28.328	6.0405	5.05
2	984.64	2.6569	15.506
3	10.071	3.1088	5.0257
Backing	INF	2.073	9.9186

40 wt% PI (through Si)

Layer	Thickness	SLD	roughness
Fronting	INF	2.073	
1	10.207	3.1015	5
2	591.24	2.4716	5
3	6.1645	4.6088	34.23
Backing	INF	0	5

Figure S.I.5. Neutron reflectometry data and fit and corresponding composition profiles for 30 to 70 wt% oligo d-IB 2200 g/mol in thin PB films.